

**OCCUPATIONAL SAFETY
AND HEALTH STANDARDS BOARD**

2520 Venture Oaks Way, Suite 350
Sacramento, CA 95833
(916) 274-5721
FAX (916) 274-5743
www.dir.ca.gov/oshsb



Attachment No. 2

INITIAL STATEMENT OF REASONS**CALIFORNIA CODE OF REGULATIONS**

**TITLE 8: Chapter 4, Subchapter 4, Article 3, Section 1518(d)
of the Construction Safety Orders**

Protection from Electric Shock**SUMMARY**

This rulemaking proposal is initiated in response to a Division of Occupational Safety and Health (Division) memorandum, dated July 28, 2003, with attached Form 9, Request for New, or Change in Existing Safety Order. The Form 9 describes an accident involving a construction industry employee who was killed (electrocuted) while attempting to demolish a concrete pad with a jackhammer. Unbeknownst to the employee, an energized, 5000-volt electrical conductor (wire) was buried in the ground beneath the pad. Following the accident, the Division determined that California does not have a standard comparable to federal OSHA's standard contained in 29 Code of Federal Regulation (CFR) 1926.416(a)(3), which specifically requires employers to ascertain the presence of exposed or concealed electrical conductors which could pose a threat to the safety of employees working in the area by either direct, or indirect contact via tools, equipment, or machinery used/operated by the employee. This determination is required to be made, and made known to employees, prior to the work being performed.

The Division evaluated existing Title 8 standards, such as but not limited to, Sections 2941 through 2944, and trenching and excavation standards contained in Sections 1539 through 1541, and concluded that California did not have a standard at least as effective as the federal standard contained in 29 CFR 1926.416(a)(3). Initially, the Division requested that proposed amendments be made to Section 2940.1 of the High Voltage Electrical Safety Orders; however due to public comments and further Board staff evaluation, it was determined that amendments should be made to the Construction Safety Orders (CSO) instead. Consequently, it is proposed to amend CSO Section 1518, Protection from Electric Shock. The proposal would require employers to ascertain whether any part of an energized electric power circuit is so located that the performance of the work may bring any person, tool, or machine into physical or electrical contact with the electric power circuit. The proposal would further require, where such circuits exist, (1) legible markings to communicate the presence and location of energized circuits or (2) warning signs be posted in accordance with Section 3340 of the General Industry Safety Orders. The proposal also requires that employees be advised as to the location of energized circuits, the hazards involved, and the protective measures to be taken in accordance with CSO Section 1509.

An editorial, clarifying amendment is also proposed in Section 1518(c), replacing the permissive term “may” with “shall” in order to ensure that employees are protected from electric shock by either protective devices or physical barricades.

Section 1518. Protection from Electric Shock

Existing Section 1518 contains standards addressing means and methods to protect employees from coming in contact with energized electrical equipment, such as use of personal protective equipment/devices, use of insulating equipment or barricades. An amendment is proposed to add a new subsection (d), which would require the employer to ascertain by inquiry, direct observation or by instruments, whether any part of an energized electric power circuit, exposed or concealed, is so located that the performance of the work may bring any person, tool, or machine into physical or electrical contact with the electric power circuit. This determination is to be made prior to the commencement of any work. Where it has been determined that such energized circuits exist, the employer would be required to provide markings to indicate the presence and location of such circuits or, post warning signs in accordance with Section 3340 of the General Industry Safety Orders (GISO). The employer would also be required to advise the employee of the location of such energized circuits, the hazards involved, and the protective measures to be taken in accordance with CSO Section 1509.

The proposed amendments are necessary to ensure that any exposed or concealed energized electric power circuits that can pose an electrocution hazard, given the location of the work to be performed, are discovered, visually identified, and their location and hazard verbally communicated to employees, along with protective measures to be taken. The proposed amendments are consistent with existing requirements contained in GISO Section 3203, Injury Illness and Prevention Program, and are also necessary to be at least as effective as federal counterpart standards contained in 29 CFR 1926.416(a)(3).

Additionally, it is proposed to replace the permissive term “may” with “shall” in existing subsection (c). The proposed amendment is necessary to clarify to the employer that the employee is required to be protected from electric shock by either protective devices or physical barricades.

DOCUMENTS RELIED UPON

- Memorandum from the Division of Occupational Safety and Health, dated July 28, 2003, with attached Form 9, Request for New, or Change in Existing Safety Order, pertaining to voltage determination.
- 29 Code of Federal Regulation 1926.416(a)(3).
- U.S. Department of Labor, Occupational Safety and Health Administration, Inspection Report and Narrative dated September 7, 1999.

These documents are available for review Monday through Friday from 8:00 a.m. to 4:30 p.m. at the Standards Board Office located at 2520 Venture Oaks Way, Suite 350, Sacramento, California.

REASONABLE ALTERNATIVES THAT WOULD LESSEN ADVERSE ECONOMIC IMPACT ON SMALL BUSINESSES

No reasonable alternatives were identified by the Board and no reasonable alternatives identified by the Board or otherwise brought to its attention would lessen the impact on small businesses.

SPECIFIC TECHNOLOGY OR EQUIPMENT

This proposal will not mandate the use of specific technologies or equipment.

COST ESTIMATES OF PROPOSED ACTION

Costs or Savings to State Agencies

No costs or savings to state agencies will result as a consequence of the proposed action.

Impact on Housing Costs

The Board has made an initial determination that this proposal will not significantly affect housing costs.

Impact on Businesses

The Board has made an initial determination that this proposal will not result in a significant, statewide adverse economic impact directly affecting businesses, including the ability of California businesses to compete with businesses in other states. Although the proposal now requires construction employers to ascertain whether exposed or concealed energized electric power circuits are located, such that they pose a threat to the health and safety of employees, the proposal does not mandate any one specific method to be used. Employers are provided a no-cost opportunity to comply through consultation with the applicable utility company or via existing documentation revealing the location of such energized conductors.

Construction employers are also required to mark or post warning signs where such circuits exist, and advise employees of the location of such lines, the hazards involved, and the protective measures to be taken. These requirements are consistent with existing CSO and GISO standards specific to hazard warning and employee communication/instruction, and are included in this proposal for clarity purposes and for consistency with federal counterpart requirements contained in 29 CFR 1926.416(a)(3). Consequently, the Board is not aware of any new costs that a representative private person or business would necessarily incur in reasonable compliance with the proposed action.

Cost Impact on Private Persons or Businesses

The Board is not aware of any cost impact that a representative private person or business would necessarily incur in reasonable compliance with the proposed action.

Costs or Savings in Federal Funding to the State

The proposal will not result in costs or savings in federal funding to the state.

Costs or Savings to Local Agencies or School Districts Required to be Reimbursed

No costs to local agencies or school districts are required to be reimbursed. See explanation under "Determination of Mandate."

Other Nondiscretionary Costs or Savings Imposed on Local Agencies

This proposal does not impose nondiscretionary costs or savings on local agencies.

DETERMINATION OF MANDATE

The Occupational Safety and Health Standards Board has determined that the proposed standard does not impose a local mandate. Therefore, reimbursement by the state is not required pursuant to Part 7 (commencing with Section 17500) of Division 4 of the Government Code because the proposed amendments will not require local agencies or school districts to incur additional costs in complying with the proposal. Furthermore, this standard does not constitute a "new program or higher level of service of an existing program within the meaning of Section 6 of Article XIII B of the California Constitution."

The California Supreme Court has established that a "program" within the meaning of Section 6 of Article XIII B of the California Constitution is one which carries out the governmental function of providing services to the public, or which, to implement a state policy, imposes unique requirements on local governments and does not apply generally to all residents and entities in the state. (County of Los Angeles v. State of California (1987) 43 Cal.3d 46.)

The proposed standard does not require local agencies to carry out the governmental function of providing services to the public. Rather, the standard requires local agencies to take certain steps to ensure the safety and health of their own employees only. Moreover, the proposed standard does not in any way require local agencies to administer the California Occupational Safety and Health program. (See City of Anaheim v. State of California (1987) 189 Cal.App.3d 1478.)

This proposed standard does not impose unique requirements on local governments. All employers - state, local and private - will be required to comply with the prescribed standards.

EFFECT ON SMALL BUSINESSES

The Board has determined that the proposed amendments may affect small businesses. However, no economic impact is anticipated.

ASSESSMENT

The adoption of the proposed amendments to this standard will neither create nor eliminate jobs in the State of California nor result in the elimination of existing businesses or create or expand businesses in the State of California.

ALTERNATIVES THAT WOULD AFFECT PRIVATE PERSONS

No reasonable alternatives have been identified by the Board or have otherwise been identified and brought to its attention that would be more effective in carrying out the purpose for which the action is proposed or would be as effective and less burdensome to affected private persons than the proposed action.